



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,390	03/28/2005	Michael Porat	05035	6737
23338	7590	03/04/2011	EXAMINER	
DENNISON, SCHULTZ & MACDONALD			MATTER	KRISTEN CLARETTE
1727 KING STREET			ART UNIT	PAPER NUMBER
SUITE 105			3771	
ALEXANDRIA, VA 22314				
			MAIL DATE	DELIVERY MODE
			03/04/2011	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/529,390	PORAT, MICHAEL	
	<b>Examiner</b>	<b>Art Unit</b>	
	KRISTEN C. MATTER	3771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 16 February 2011.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,2,6,8-13,15,16,19,20,23 and 27-33 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1,2,6,8-13,15,16,19,20,23 and 27-33 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date. _____ .	6) <input type="checkbox"/> Other: _____ .

## **DETAILED ACTION**

This Action is in response to the amendment filed on 2/16/2011. Claims 1, 27, and 32 have been amended and no claims have been cancelled or added. Thus, claims 1, 2, 6, 8-13, 15, 16, 19, 20, 23, and 27-33 are currently pending in the instant application.

**Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.**

### **Response to Arguments**

Applicant's arguments, filed 2/16/2011, with respect to the rejection(s) of claim(s) 1, 2, 6, 8-13, 15, 16, 19, 20, 23, and 27-33 under Lund have been fully considered and are persuasive. It is not clear if Lund's elastic band is attached to the hood or not. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Smissen and Stetson.

Applicant's arguments regarding van der Smissen and Richardson both having multiple securing means and thus not readable on the new language of the elastic band being the "sole sealing means" are not persuasive because as discussed in the following rejection, Richardson's sealing means is not critical to the invention and thus can be modified. Furthermore, Richardson discloses that the drawstring "is pulled securely around the neck" while the strap 64 "can also be pulled down beneath the user's chin" (column 6, lines 30-35). Use of the language "can be" implies that the stretchable strap 64 is not critical to the Richardson device and thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to not use

the strap for securing the hood (i.e., since it "can" or then inherently "can not" be pulled down for sealing) or to eliminate the strap (64) completely, either case making the modified elastic band the sole means for securing the hood to the user as required by the claims.

### **Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 1, 2, 6, 8-13, 15, 16, 19, 20, 23, and 27-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

In claims 1, 27, and 32, the "A.", "B.", "1.", "2.", and "3." should be changed to "(A)", "(B)", "(1)", "(2)", and "(3)" respectively to avoid use of periods in the claims and to avoid confusion with other claim numbers. Also, use of the language "may be" and/or "can be" in line 2 of the claims makes the claims indefinite because it is unclear if the prior art need to have the following limitation of being supplied in a single pack or not to read on the claims. Finally, in the 3rd to last line of each claim, "elastic sealing and adjusting means" lacks antecedent basis in the claims (i.e., "means" should be changed to "band").

In claims 19 and 20, the terms "the separate sealing band" and "the band" are somewhat confusing because the "band" has been previously referred to as the "elastic sealing and adjusting band" in claim 1. Applicant should keep claim language consistent throughout the claims to avoid possible confusion.

In claim 23, line 2, use of the term “can be” makes the claim indefinite because it is unclear if the prior art need to actually be able to be turned inside out after use or not to read on the claim. Examiner suggests changing "can be" to "is adapted to be" to overcome the rejection.

In claim 28, “providing a foldable two part escape mask with separate circumferential elastic sealing means as in claim 1” is somewhat confusing because it is unclear if the entire mask assembly device of claim 1 need be provided or just certain features. Examiner suggests changing the language to read "providing the two part escape mask assembly of claim 1" to overcome the rejection. Also, in step c) “the separate elastic sealing means” and in step d) "elastic band" should be amended as mentioned regarding claims 19 and 20 to keep claim language consistent.

Claims 2, 8-13, 15, 16, 29-31, and 33 are rejected by virtue of their dependence on a rejected claim base.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 6, 8, 12, 16, 19, 20, 23, 27, 28, 30, and 31 are rejected under 35 U.S.C. 103(a) as obvious over Richardson (US 6,134,716) in view of van der Smissen et al. (US 4,807,614, herein referred to as “Smissen”) and Stetson (US 2,435,167).**

Regarding claims 1, 12, 16, 20, and 27, Richardson discloses a two part mask assembly that may be supplied in a single pack, and that enables a user to breathe filtered air, the pack consisting essentially of: a first part that is a mask formed as a hood (12) covering the entire head when unfolded consisting essentially of a single bag of transparent film material impermeable to gases (see column 5, lines 35-40), a filter and filter connection assembly (18) connected to the bag and disposed in the wall of the bag (column 3, lines 1-20) opposite the lips of someone wearing the mask (see Figure 1), and exhalation valve (20) disposed in the wall of the bag and worn in the area of a user's nose and/or mouth (see Figure 1), and a second part that is a separate sealing means (60), the bag and the sealing means defining within the bag a single minimum air space between the user and the bag wall (see Figure 1; there is no additional structure that would create a separate plenum space).

To the extent, if any, that Richardson does not clearly mention the bag material is impermeable to gases, Examiner points to the fact that the hood has valves and filters and to column 4, lines 48-49, in which Richardson discloses the strap is for preventing contaminated air from entering the interior of the hood. This seems to clearly indicate that the bag is made of an impermeable film material, but regardless, it is obvious to one of skill in the art to make a hood for protecting against air toxins from a material that is impermeable to gases. The flexible nature of the hood and the fact that it is a sheet of plastic material inherently makes the hood flat-foldable to pocket size as is well known in the art for storage.

Richardson lacks the sealing means being a separate circumferential elastic sealing and adjusting band. However, Smissen discloses another protective hood with a drawstring (9) that is separate from the hood and not connected to the bag. Therefore, it would have been obvious to

one of ordinary skill in the art at the time the invention was made to have used a separate, unattached drawstring as taught by Smissen in place of the drawstring of Richardson in order to allow the drawstring to be moved to a comfortable position on the user's neck (whatever a comfortable position might be considered by a particular user) or to avoid the potential of the drawstring getting stuck inside the channel of Richardson for example.

In addition, Richardson as modified by Smissen lacks a "circumferential band" as required by the claims. However, Stetson discloses, in a protective hood, that drawstrings and elastic rubber bands are interchangeable for sealing (see column 3, lines 35-37). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have replaced the separate drawstring of Richardson/Smissen with a separate rubber band since the two sealing means are well known equivalents as taught by Stetson. Such a modification appears to involve the mere substitution of one well known sealing means for another to yield predictable results that do not patentably distinguish an invention over the prior art. Since the bands are used on humans, it would be obvious to provide a snug comfortable fit that would not choke someone while still providing a good seal.

Richardson discloses that the novel filter, valve, and sealing means can be used "individually" (column 2, lines 40-42), implying that the sealing means is not a critical feature of the invention and thus would work equally well with any well known sealing means. Furthermore, Richardson discloses that the drawstring "is pulled securely around the neck" while the strap 64 "can also be pulled down beneath the user's chin" (column 6, lines 30-35). Use of the language "can be" implies that the stretchable strap 64 is not critical to the Richardson device and thus it would have been obvious to one of ordinary skill in the art at the time the invention

was made to not use the strap for securing the hood (i.e., since it "can" or then inherently "can not" be pulled down for sealing) or to eliminate the strap (64) completely, either case making the modified elastic band the sole means for securing the hood to the user as required by the claims.

Regarding claim 6, Richardson discloses a "transparent front panel" worn opposite the eyes, nose, and mouth (column 4, lines 45-50). In addition, examiner notes that what areas of the bag are transparent is considered an obvious design consideration depending on how easily a user wishes to be able to see out of the mask versus how much a user wishes to hide their head for aesthetic or material reasons.

Regarding claim 8, "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)(citations omitted). In this case, Richardson discloses the filter member as sealed to the inner surface of the hood (column 3, lines 8-11) but does not specifically state that it is heat sealed (although Richardson does disclose the bag itself is heat-sealed in column 4, line 16). It is well known to persons of ordinary skill in the art to heat seal plastic materials as an effective means for creating air-tight barriers and therefore would have been obvious to one of ordinary skill in the art to heat seal the filter assembly onto the bag for such reasons. Such a modification would involve there mere use of a well known method of sealing in a well known device to yield predictable results that do not patentably distinguish an invention over the prior art.

Regarding claim 19, Richardson as modified by Smissen and Stetson does not disclose 2 elastic bands. However, it is well known to those of ordinary skill in the art that elastic bands are replaceable and therefore it would have been an obvious design consideration to one of ordinary skill in the art at the time the invention was made to have provided a second (i.e., spare) elastic sealing means in the modified mask of Richardson in order to replace the sealing means should it break or need replacement, for example (i.e., there is no limitation in the claims that the two sealing means must be used at the same time even, just that two have to exist).

Regarding claim 23, Richardson does not specifically state that the hood is turned inside out after use, however, the flexible nature of the hood material inherently allows the hood to be able to be turned inside out after removal from the head.

Regarding claim 28, the modified device disclosed by Richardson has all of the structural limitations needed to perform the recited method steps and is fully capable of doing so, including unfolding the hood and stretching an elastic sealing band over the hood and around the neck. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, upon seeing the modified Richardson device, to perform the recited method steps of the instant claim 28 in order to don the hood.

Regarding claims 30 and 31, Richardson as modified by Smissen and Stetson is silent as to the claimed dimensions of the folded hood. However, folding hoods for storage is well known in the art and given that the hood of Richardson is for the same purpose of the instant invention (i.e., covering a user's entire head) and made of the same material (i.e., a thin sheet of plastic), it appears as though the device of Richardson would be fully capable of being folded to the claimed size. In addition, absent a critical teaching and/or showing of unexpected results from

the claimed folded dimensions, examiner contends that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the modified hood of Richardson foldable to the claimed size to allow the device could be carried in a pocket as is well known in the art. Furthermore, as discussed above, there is nothing structurally that would prevent the device from being folded to the claimed dimensions and it appears as though the device of Richardson would perform equally well if folded to the claimed dimensions for storage.

**Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson, Smissen, and Stetson, as applied to claims 1, 6, 8, 12, 16, 19, 20, 23, 27, 28, 30, and 31 above, and further in view of McGuinness (H1316).** Richardson does not disclose the hood as being made of a laminate of more than one plastic material. However, McGuinness discloses a similar protective hood formed from plastic laminates of more than one material (see column 2, lines 43-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the hood of Richardson from a plastic laminate as disclosed by McGuinness in order to more effectively protect the user from contaminants for extended periods of time. In addition, it appears as though the device disclosed by Richardson would perform equally well with a hood made of a plastic laminate as opposed to a single layer of plastic film.

**Claims 9-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson, Smissen, and Stetson, as applied to claims 1, 6, 8, 12, 16, 19, 20, 23, 27, 28, 30, and 31 above, and further in view of Wen (US 6,681,765).**

Regarding claims 9 and 11, Richardson discloses a multilayer filter with active charcoal but is silent as to an antiseptic. Wen discloses, in a respiration mask, a multilayer filter with charcoal and antiseptic agents including chlorhexidine (see column 2, lines 55-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided Richardson's filter with an antiseptic agent as taught by Wen in order to more effectively protect the user from viruses and bacteria in the contaminated air. Furthermore, there is nothing structurally preventing such a modification and it appears as though the device disclosed by Richardson would perform equally well with the antiseptic layer.

Regarding claim 10, Wen does not disclose that the charcoal is sandwiched between multiple layers of antiseptic agents. However, absent a critical teaching and/or a showing of unexpected results from having a charcoal layer sandwiched between the antiseptic layers, Examiner contends it would have been an obvious design consideration to one of ordinary skill in the art at the time the invention was made to have used two antiseptic layers surrounding a charcoal layer in the multilayer filter disclosed by the modified Richardson reference in order to use multiple antiseptic agents for example or for more effective protection against viruses and bacteria. Furthermore, there is nothing structurally preventing such a modification and it appears as though the device disclosed by Richardson and Wen would perform equally well with the antiseptic layers sandwiching the charcoal layer.

Regarding claim 13, Richardson does not disclose the particle sizes filtered by the filter. However, if the limitation "greater than 2 microns" includes macroparticles that would inherently be filtered out by the filter of Richardson (i.e., large dust). In any case, Wen discloses that the filter filters out particles in excess of 0.3 microns (column 5, line 60), which overlaps the

claimed range of greater than 2 microns. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have designed the filter of Richardson to filter out particles greater than 2 microns in order to prevent contaminants from being breathed in by the user.

**Claims 15 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson, Smissen, and Stetson, as applied to claims 1, 6, 8, 12, 16, 19, 20, 23, 27, 28, 30, and 31 above, and further in view of Courtney (US 4,981,134).** Richardson does not disclose the valve as being embedded in the filter. However, Courtney discloses a filter assembly for a face mask that includes an exhalation valve (7) embedded in the filter assembly (see Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a filter assembly as taught by Courtney in the mask of Richardson in order to allow the valve and filter to both be easily replaced as needed. Furthermore, there is nothing structurally preventing such a modification and it appears as though the device disclosed by Richardson would perform equally well with the valve embedded in the filter.

**Claims 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson, Smissen, and Stetson, as applied to claims 1, 6, 8, 12, 16, 19, 20, 23, 27, 28, 30, and 31 above, and further in view of Nur et al. (US 5,875,775, herein referred to as “Nur”).**

Regarding claim 32, Richardson as modified by Lund teaches the structural limitations of claim 32 as discussed above for claim 1 but does not specifically mention a pouch. However, Nur teaches, in a similar protective hood, that the hood/filter/valve arrangement allows the

device to be folded into small individual packages of 8 x 12 cm and stored in hermetically sealed pouches for carrying in a shirt pocket or handbag (column 6, lines 1-15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the Richardson's modified device with a pouch as taught by Nur in order to allow the device to be stored longer, to prevent dirt buildup while on the shelf, or to keep all the components together for easy access.

Regarding claim 33, the modified Richardson device does not specifically disclose that the pouch is sealed under vacuum. However, absent a critical teaching and/or showing of unexpected results from sealing the modified Richardson hood under vacuum, examiner contends that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have hermetically sealed the pouch under vacuum since vacuum packing is a well known and commonly used technique to store goods in plastic to prolong shelf life and minimize space.

### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The balance of art cited is to show other references that teach the equivalence of drawstrings with elastic bands.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KRISTEN C. MATTER whose telephone number is (571)272-5270. The examiner can normally be reached on Monday - Friday 9-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kristen C. Matter/  
Examiner, Art Unit 3771